UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,991	02/23/2006	Atsushi Takahashi	10114961	3219
	7590 03/06/200 AW OFFICE, PC	EXAMINER		
2210 MAIN ST	REET, SUITE 200	MAI, HAO D		
SANTA MONI	CA, CA 90405		ART UNIT	PAPER NUMBER
			3732	
			MAIL DATE	DELIVERY MODE
			03/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application	No. Applicant(s)						
Office Action Summary			10/524,991		TAKAHASHI, ATSUSHI				
			Examiner		Art Unit				
			HAO D. MA	I	3732				
٦ Period for F	The MAILING DATE of this commun Reply	ication appe	ears on the	cover sheet with the c	correspondence ad	ddress			
WHICHE - Extension after SIX - If NO perion Failure to Any reply	RTENED STATUTORY PERIOD F EVER IS LONGER, FROM THE M ns of time may be available under the provisions (6) MONTHS from the mailing date of this comn riod for reply is specified above, the maximum sto or reply within the set or extended period for reply or received by the Office later than three months a atent term adjustment. See 37 CFR 1.704(b).	IAILING DA of 37 CFR 1.136 nunication. atutory period wi will, by statute, o	TE OF THI 6(a). In no even ill apply and will cause the applic	S COMMUNICATION t, however, may a reply be tin expire SIX (6) MONTHS from ation to become ABANDONE	N. nely filed the mailing date of this of D (35 U.S.C. § 133).	•			
Status									
1)⊠ Re	esponsive to communication(s) file	ed on <i>01 De</i>	ecember 20	n8.					
· <u> </u>	,	2b)⊠ This a		<del></del>					
<i>′</i> —	nce this application is in condition	<i>,</i> —			secution as to the	e merits is			
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition	of Claims								
4)⊠ CI	aim(s) <u>1-10</u> is/are pending in the a	application.							
•	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
·	6)⊠ Claim(s) <u>1-10</u> is/are rejected.								
•	aim(s) is/are objected to.								
	aim(s) are subject to restric	ction and/or	election red	guirement.					
Application				1					
	•								
•	e specification is objected to by th								
•	e drawing(s) filed on <u>01 Decembe</u>		•	· · · · · · · · · · · · · · · · · · ·	-	niner.			
-	pplicant may not request that any obje			•					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)∐ Th	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority und	ler 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some coll None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
2) Notice of 3) Informat	f References Cited (PTO-892) f Draftsperson's Patent Drawing Review (F ion Disclosure Statement(s) (PTO/SB/08) b(s)/Mail Date	PTO-948)		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate				

Application/Control Number: 10/524,991 Page 2

Art Unit: 3732

## **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/01/2008 has been entered.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made
- 3. Claims 1, 3-8, and 10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Deady (2,265,804) in view of Politzer et al. (2,804,728).

Regarding claims 1, Deady discloses a device comprising: a cup-shaped core (formed by nozzle 10 and pocket 16) having a cylindrical profile, an exterior wall, and a hollow interior region; a shaft 13 containing a connecting means 7 capable of connecting the device to the dental rotary instrument and capable of avoiding vibration around a rotation axis of the core during rotation; a hydrophilic sponge 12 covering the exterior wall of the core; and a latch plate (clamp 15) fixing the hydrophilic sponge to the core (Figs. 1-2). The sponge is inherently capable of being immersed in water prior to operation.

Art Unit: 3732

Note that the recitation "a prophy chip, mounted on a top..." has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. In this case, merely calling/claiming a prophy chip in the preamble is more or less an intended use and does not convey structural limitations.

Deady discloses the invention substantially as claimed except for the hydrophilic sponge being a grindstone sponge comprising a grindstone therein (claim 1). It is well known in the art of polishing and cleaning that grindstone and/or abrasive grains are embedded into a sponge to clean and polish surfaces. For example, Politzer et al. disclose a sponge 10 having abrasive material 14, e.g. powdered or ground pumice sand, emery, carborundum, etc., embedded therein (Fig. 1; column 2 lines 8-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Deady by embedding a grindstone, i.e. abrasive material such as carborundum, into the hydrophilic sponge in order to provide the sponge an abrasive surface that effectively cleans and polishes surfaces. In the case of cleaning the skin, such finely grounded or powdered abrasive material would effectively cleans and exfoliate the skin.

As to claims 3-8 and 10, Deady discloses the core comprising water and/or soap, which inherently is a foaming and/or coating agent, which is to be discharged through the pores 14 of

core 13 (Figs. 1-4; column 1 lines 60-64). The exterior portion 16 of the core is a nonwoven, hydrophilic, flexible, three-dimensionally, continuous, and porous film capable of conducting a solution (column 2 lines 34-48). Note that the core 13 is directly connected to shaft H.

4. Claim 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deady in view of Politzer et al., and further in view of Hirota et al. (JP 2002053469).

Deady/Politzer discloses the invention substantially as claimed except for the grindstone being specifically a grindstone of

Hirota et al. disclose a composition containing  $Ca_{10}(PO_4)_6(OH)_2$  for rubbing onto the skin (see enclosed Derwent description). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Deady/Politzer by utilizing such particular grindstone of  $Ca_{10}(PO_4)_6(OH)_2$  embedded in the sponge in order to effectively clean and exfoliate the skin, while enhancing immunity as taught by Hirota et al.

5. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. Cyer (5,052,840) in view of Politzer et al. (2,804,728).

St. Cyer discloses a device (refer to Figs. 4-5) comprising: a cup-shaped core 110 having a cylindrical, cupped, or disk profile, an exterior wall and a hollow interior region; a shaft 14 (or best shown as 214 in Fig. 6-8) having a connecting means; a hydrophilic sponge 126 covering the exterior wall of the core 110; and a latch plate 120 fixing the hydrophilic sponge to the core. Note that the sponge is inherently capable of being immersed in water prior to operation.

St. Cyer however is silent to the hydrophilic sponge being a grindstone sponge comprising a grindstone therein (claim 1). It is well known in the art of polishing and cleaning that grindstone and/or abrasive grains are embedded into a sponge to clean and polish

Art Unit: 3732

surfaces. For example, Politzer et al. disclose a sponge 10 having abrasive material 14, e.g. powdered or ground pumice sand, emery, carborundum, etc., embedded therein (Fig. 1; column 2 lines 8-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify St. Cyer by embedding a grindstone, i.e. abrasive material such as carborundum, into the hydrophilic sponge in order to provide the sponge an abrasive surface that effectively cleans and polishes surfaces.

As to claim 9, note that the sponge 126 is folded over an edge of the wall 108 into the hollow interior region of the core 110 and gripped by the latch plate 120 (Fig. 5).

## Response to Arguments

6. Applicant's amendments/arguments filed 12/01/2008 have been fully considered but moot in view of new ground(s) of the rejection. Applicant's amendment to the claims, particularly the newly added limitation "an exterior wall" to the core, has overcome Wiseman. Thus, the rejection(s) under Wiseman has been withdrawn.

## Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAO D. MAI whose telephone number is (571)270-3002. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Application/Control Number: 10/524,991 Page 6

Art Unit: 3732

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hao D Mai/ Examiner, Art Unit 3732

/Cris L. Rodriguez/ Supervisory Patent Examiner, Art Unit 3732